All Experimenters' Meeting
NuMI Target Situation/Status

Week of April 25 to May 2

1) On Monday April 15 the target module was returned to the target chase with the revised spool piece.

2) A Target scan on Monday evening showed that the obstruction was completely removed. The target was dry.

3) The rest of the week was spent installing and commissioning the Helium over pressurization system. The cooling water system was restored, and the relative pressures of the water and Helium system were established.

4) Additional target scans were performed on Wednesday and Thursday evenings. The target remained dry.

All Experimenters' Meeting
NuMI Target Situation/Status(2)

5) Various instrumentation systems for monitoring the Helium were studied. An attempt to use a leak detector to detect Helium in the surge tank on the return water line was determined to have a time constant too long for effective monitoring.

6) The only effective monitoring is to watch input Helium flow. Parts were ordered on Friday. Small Helium leaks OUTSIDE of the target were chased, but not all were found. A small consumption of Helium is still noted.

7) The level of the target RAW water system has also been monitored. Some sudden changes, probably related to the periodic elimination of gas bubbles trapped in the water coils, have been noted. These events are "step functions" and are not consistent with the return of a slow leak. As noted earlier, the target is still dry.

8) The shielding was restored after alignment checks. The crane electronics were removed on Saturday morning.

All Experimenters' Meeting
NuMI Target Situation/Status(3)

9) Saturday afternoon regular operations began. Some time was necessary to restore the NuMI slip-stacking cycles. Early Monday morning an alarm was noted because the leak rate of the Helium suddenly DECREASED. Although not understood, it was decided to stop running while this condition was considered. It has been decided today to resume running.

Plans for week of May 2, 2005

1) Install the Helium mass flow metering module when it is available.

2) Continue to run with slip-stacking cycles.

3) Increase the intensity on target after the mass flow system is functional.

4) Monitor for the return of the target RAW leak: run with the Helium over-pressurization for as long as possible.

All Experimenters' Meeting
NuMI Target Situation/Status(4)

Longer term:

1) Modifications to the second (spare) target are being developed. A longer term redesign of the graphite target system will be considered.

2) An air cooled (lower power/lower intensity) back up target is being designed and built. Different materials require the MINOS Experiment to consider the impacts of the use of this alternate target.

3) Given the very long lead times involved, additional spare target materials have been ordered, and arrangements for production of one additional target and baffle in Russia are being negotiated.

All Experimenters' Meeting MINOS Experiment

The detectors are operational.

Data taking with beam has resumed.

The Target is in the "medium energy beam" configuration at this time with the agreement of the MINOS experiment.

Status of MINOS Detectors

- Both near and far detectors are in good operational condition.
- Took advantage of downtime to do maintenance, work on tracking nuisance noise problems.
- One disk crash on monitoring machine at far detector – no atmospheric or beam data lost.
- Observing neutrinos from recent studies as expected.

Protons on target 4/30 0800 to 5/2 0800.

Approx. 8.5×10^{15}

Previous running 6.5×10^{17}